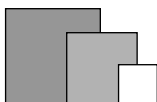




**Research Report 0110**

**MISTRAL<sup>®</sup>**

**A Model to Measure the Administrative  
burden of Businesses**



***SCALES***

SCientific Analysis of Entrepreneurship and SMEs

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# 1 Introduction

## 1.1 General

Administrative burdens can be measured using Mistral<sup>®</sup>, the Dutch acronym for **M**ea<sup>s</sup>uring **I**nstrument **A**dministrative **B**urdens (Burdens are 'Lasten' in Dutch). This report contains a description of Mistral<sup>®</sup>.

We will start with a brief introduction of the types of legal obligations enterprises will encounter in the constitutional state or, in other words, a modern democracy. Administrative burdens are the costs of a special type of these legal obligations of enterprises, viz. obligations to transfer information to government (section 1.2). This chapter will be closed with a brief history of Mistral<sup>®</sup> (section 1.3) and the presentation of the outline of this report in section 1.4.

## 1.2 Regulations applying to businesses

Government of a social constitutional state imposes obligations on businesses to regulate their behaviour and acquire information about their activities for control purposes. There are two types of obligations. The first type relates to the 'content' of these activities and endeavours to achieve compliance by businesses with the standards stipulated by society. The second type relates to the compulsory transfer of information by businesses (Nijsen, 2000: 18). The costs incurred by businesses in complying with the obligation to transfer information are called administrative burdens.

### *Content obligations*

What does it mean for a business to operate within a social constitutional state? Businesses have to behave in a certain way or abstain from certain types of behaviour in order to allow the government to safeguard public interests<sup>1</sup>. Such rules of behaviour applying to businesses are called content regulations, many of which are laid down in the Special Volumes of Administrative Law<sup>2</sup>.

### *Information obligations*

With a view to being able to implement these regulations and the administrative monitoring and enforcement of compliance with these content regulations, the government also imposes transfer of information regulations on relevant conditions in, and behaviour/transactions by businesses. The majority of the transfers of information obligations are also included in the Special Volumes of Administrative Law.

### *Demarcation line*

The demarcation line between content and information transfer obligations is not always clear. In cases where the content obligations primarily aim to realise physical objectives in businesses, such as safe working conditions in conformance with the specifi-

<sup>1</sup> This also applies, of course, to the citizens in a social constitutional state.

<sup>2</sup> The general part is comprised mainly of abstracts and generalizations of the Special Volumes, in the fields of procedures such as objections and appeals.

cations of the Working Conditions Act, there is little room for doubt. Making sure, for example, that it is possible to look outside from the work location, is complying with a content obligation. Reporting this fact in the Annual Working Conditions planning is a transfer of information obligation. Another example is employing persons from certain target groups, for example ethnic minorities. Hiring people from this category is complying with a content obligation. Recording this fact - in compliance with the law on 'Stimulating the Position of Ethnic Minorities on the Labour Market' in a report that has to be submitted annually and providing all the accompanying particulars and registrations - is complying with transfer of information obligations.

The regulations covering the transfer of information to third parties, for example citizens, differ from those applying to businesses that are directly involved and the government. These transfer of information obligations do not aim primarily at supplying information to the government for monitoring and enforcing compliance, but aim much more at achieving a public goal in a more direct way, for example, well informed citizens or consumers so that these will steer their behaviour in the desired direction. Regulations involving the transfer of information to third parties should, in our opinion, be considered to be content obligations. This becomes relevant as soon as safeguarding a public interest requires that third parties, usually citizens or consumers, are informed or will be informed about the behaviour of certain parties or about the characteristics of products. Public interests involve, for example, protecting the privacy of citizens, measures to safeguard the health of consumers or environmental protection.

The law protecting personal privacy obliges the holder of such registers to inform the citizens whose particulars are contained in these registers and request their permission immediately, if the information in the register is to be used for other purposes than those for which it was collected. The content obligations on which this is based and apply to the register holder are the rules governing the fact that personal particulars may not be used for purposes other than those for which they were intended. It is compulsory for tobacco manufacturers to warn (potential) buyers of their products that smoking is a health hazard. A similar obligation applies for manufacturers of alcohol drinks. Another example is the obligation to attach information labels to goods. In all these cases the transfer of information to third parties refers to a content obligation. As soon as parties keeping such registers - tobacco manufactures, breweries and power suppliers - have to inform the government about the transfer of information to third parties then the transfer of information obligations act as an instrument for administrative monitoring and enforcement (Nijsen, 2001; to be published).

### 1.3 A short history of Mistral®

In 1994 the Secretary of State of the Dutch Ministry of Finance installed a commission the 'Commissie Verminderende Administratieve Lasten' (the Commission to Reduce Administrative Burdens, named after its chairman the Commission van Lunteren). One of the measures taken by the Commission van Lunteren was to instruct EIM to develop a special fiscal module as part of Mistral® (van Lunteren, 1998: 194). This module focuses on administrative burdens for businesses, the consequence of fiscal law. The Commission instructed EIM to start with Payroll tax. However, in 2001, there are about six or seven separate fiscal domains in Mistral®, for instance the domains VAT, Income Tax, and Corporate Tax.

The Commission on 'Administratieve Lasten'<sup>1</sup> (Commission on Administrative Burdens named after its chairman, Slechte, the Slechte Commission), which was responsible for advising the Dutch government on ways of reducing the administrative burdens in all policy areas, recommended that all Dutch departments should use the results of Mistral® measurements when compiling policy to reduce administrative burdens imposed on businesses. The Commission advised each and every department to start preparing this type of policy with a bottom-up baseline measurement of all relevant legislation, in combination with a system of monitoring on an annual base in order to set measurable targets (Commissie Administratieve Lasten, 1999). This positive advice given by the Slechte Commission was - among others - based on reports of the Netherlands Bureau for Economic Policy Analysis (Centraal Planbureau) and IOO, the Dutch Institute for Research of Government Expenditures (Centraal Planbureau, 1999; Van Ingen, 1999). The Dutch government accepted the Commission's advice.

To date EIM has used Mistral® to carry out baseline measurements on behalf of the Dutch Ministry of Finance, the Ministry of Economic Affairs, the Ministry of Social Affairs and Employment, the Ministry of Justice and the Ministry of Health, Welfare and Sport. Since 1999 EIM has also been responsible for the national monitor of administrative burdens for all policy areas.

## 1.4 Outline of the report

The outline of this report is as follows. We continue with answering the question why a model like Mistral® is needed in chapter 2. When to apply Mistral® will be dealt with in chapter 3. In chapter 4 we will discuss how Mistral® works. We will present a detailed technical description of Mistral® in chapter 5. Chapter 6 contains a description of the additional steps, necessary to break down the results of the main model to industry and size class of enterprises. Finally, we will present some results of Mistral® in chapter 7.

<sup>1</sup> Installed at November 27, 1998, by the Dutch Ministers of Economic Affairs and Domestic Affairs; Nr. 98069082 WJA/W.





## 2 Mistral®: why do we need it?

### 2.1 Introduction

Mistral® is a model to calculate administrative burdens for businesses adequately and efficiently. Why are we interested in facts about administrative burdens? We shall answer this question in section 2.2. Why a model is needed to determine such simple things like administrative burdens is the question discussed in section 2.3.

### 2.2 Why is information about administrative burdens relevant?

#### 2.2.1 *Brake on economic growth*

To an increasing extent it is being recognised that unnecessary compliance costs for businesses - administrative burdens are one part of the compliance costs - may have adverse effects on economic growth and employment. Information obligations place a relatively heavy administrative burden on medium-sized and small businesses (Boog et al., 1994; Allers, 1994; Verwaal, 2000; OECD, 2001). For this reason policy is being developed, both nationally and internationally, aiming to eliminate or prevent unnecessary compliance costs - in particular for small and medium-sized businesses (OECD/PUMA, 1997; EIM/ENSR, 1995). Sandford argues that tax compliance costs have undesirable distributional effects. They are capricious in their incidence, regressive and fall with disproportionate severity on small firms in particular (Sandford, 1995). Other studies indicated also that administrative burdens are higher for small firms, in terms of costs per employee or as a percentage of turnover (Allers, 1994; Boog, 1994). Estimates of the cost of complying with information transfer for businesses as a percentage of the GDP vary from 2.2 in the Netherlands to 3 or 4% of GDP in other countries of the European Union (Boog, 1999; EIM/ENSR, 1995; OECD, 2001).

#### 2.2.2 *Hidden and intermingled costs, 'off-budget' effects*

The administrative burdens incurred by businesses are in fact hidden costs. No explicit account of these can be found in any administration kept by businesses. Administrative burdens and other administrative costs are highly intermingled (General Accounting Office, 1996: 5, 48-52; Van der Burg en Nijssen, 1998: 263-276). This is what we call the allocation problem of administrative burdens.

Even more serious is the fact that the compliance costs for businesses are not included when compiling the National Budget. So administrative burdens are 'off-budget' effects of regulations. Officials who are responsible for designing new legislation and regulations are generally badly informed about the 'off-budget' effects of regulations. Estimates of the costs and benefits of legislation and regulations are usually limited to the consequences for the National Budget ('on-budget' effects). In this respect Van der Bij refers to internal and external regulation costs (Van der Bij, 1994: 227 ff.). Regulation costs, which are included in the National Budget, are termed internal regulation costs; the remaining regulation costs, which remain outside the budget, are termed external regulation costs. Consequently, when estimating the budget, calculations are usually based on a considerably low budgetary price, and therefore there is little incentive to reduce the costs of regulation. Nowadays, this problem is internationally recognised. 'The perceived intrusiveness of government regulation in many OECD countries could be detected only through anecdotal information, partial indicators and general impres-

sions. Systematic efforts to track and account for regulatory effects are uncommon despite a recognition that the scope of regulation is broad indeed' (Hopkins, 1997: 264).

## 2.3 Why do we need a model for calculating administrative burdens?

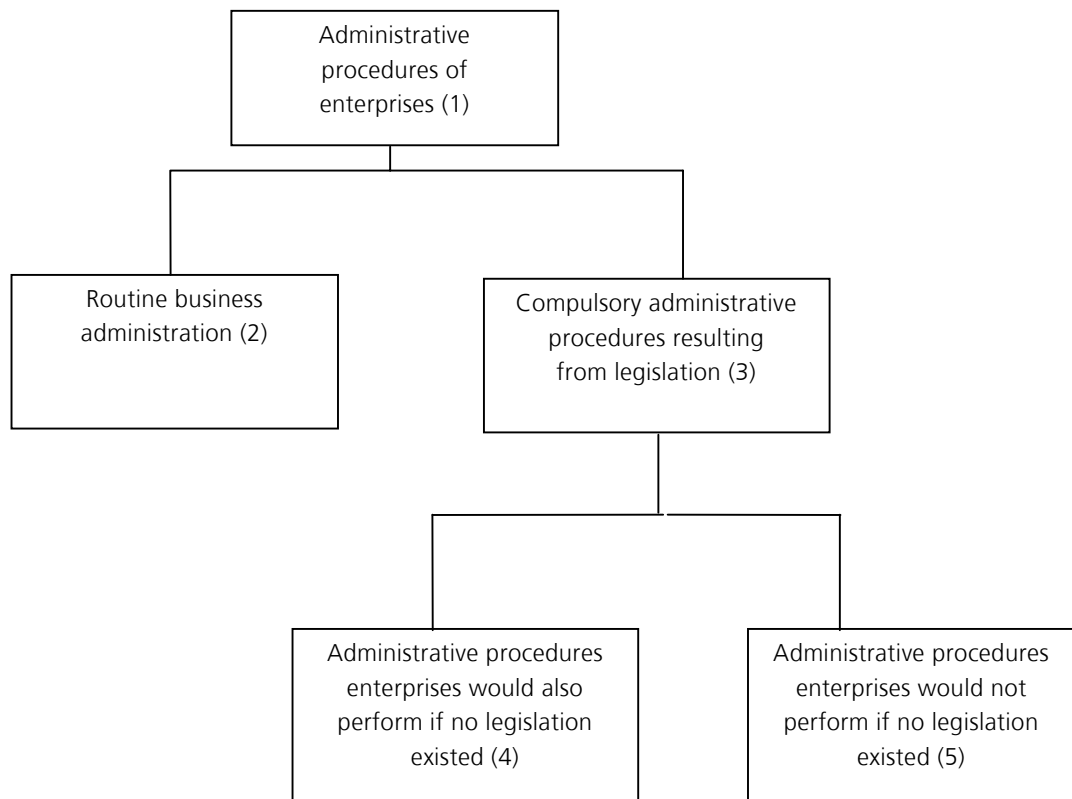
### 2.3.1 *Conceptual framework*

In order to solve the problem of the phenomenon of the hidden costs and the allocation problem we need a conceptual framework that enables the positioning of administrative burdens within individual enterprise costs.

In theory, the administrative activities that enterprises have to carry out can be distinguished as being of several types (Van der Hauw, 1996). Chart 1 gives a theoretic framework of these different types of activities. Most of all the administrative procedures that enterprises carry out (block 1 in chart 1), are done for their own sake, because they provide specific and valuable information about the enterprise (block 2). About 60% of total administrative costs of enterprises originate from routine business administration as mentioned in block 2 (Boog, van der Burg and Regter, 1994). Examples of routine business administration are warehousing, procurement and sales administration and records of debtors. The rest of the administrative activities - about 40% of the total administrative costs of enterprises (Boog et al., 1994) - are carried out by enterprises in order to meet information obligations that result from national and international legislation (block 3). These administrative activities are compulsory for enterprises and we define the costs of administrative activities that enterprises have to undertake in order to cope with these legislative information obligations as administrative burdens. So roughly speaking, administrative burdens amount to about 40% of the total administrative costs of businesses.

Compulsory administrative activities do not only create burdens for enterprises. Some of them give specific and valuable information at firm level and enterprises would carry them out even if no legislation existed (block 4). An example of this is the obligation referring to the annual account. About 40% of the total administrative burdens (block 3 = 100%) originate from administrative activities firms would also perform if no legislation existed. The rest of the administrative activities - 60% of administrative burdens - would be omitted by enterprises if no legislation existed (Boog et al., 1994).

Chart 1 Conceptual framework of types of administrative activities for enterprises



Source: EIM/ENSR, 1995.

### 2.3.2 Bottlenecks encountered when assessing administrative burdens

Assessing administrative burdens is complex, because of the allocation problem. In order to be able to assess the administrative burdens of information obligations in practice and solve these problems, we will have to (Sandford, Godwin, Hardwick en Butterworth, 1981; Van der Burg en Nijsen, 1998):

- 1 distinguish between administrative activities that are part of the business administration and administrative activities that are the result of government-imposed legislation;
- 2 distinguish between actual administrative burdens (in terms of time or money) and perceived administrative burdens (annoyance costs);
- 3 clarify the different types of administrative activities for the experts of the enterprises that are to be interviewed.

### 2.3.3 How can Mistral® help?

Basically, there are two approaches to the assessment of administrative burdens: the 'top-down approach' and the 'bottom-up approach'. The main characteristics of both approaches are presented in table 2.1.

**Table 2.1 Overview of approaches and their main characteristics in order to assess administrative burdens**

<i>Aspects</i>	<i>Top-down approach</i>	<i>Bottom-up approach</i>
Basic principle	Unit: enterprise	Unit: law/regulation
Coverage of policy areas	All policy areas	One policy area
Level of aggregation	High	Low
Research instrument	Mail questionnaire	Expert-interviews in combination with group discussions

*Source: Van der Burg en Nijsen, 1998: 267.*

### *'Top-down approach'*<sup>1</sup>

In the 'top-down approach' the individual enterprise is the starting point, the statistical unit. The following research phases are part of this approach:

- 1 the examination of the total administrative costs of an individual enterprise;
- 2 the allocation of these costs over the routine business administration and those compulsory administrative activities resulting from information obligations;
- 3 the allocation of the burdens resulting from compulsory administrative activities of information obligations over the relevant policy areas that the individual enterprise has to comply with.

This type of information is mostly gathered by means of a mail questionnaire. A representative sample of firms is surveyed in order to obtain information about the administrative burdens and other relevant data with respect to the individual enterprise (firm size, turnover, profits, etc.).

An important advantage of this approach is that the administrative burdens and other data are available at the level of the individual enterprise. The large number of enterprises and the variables involved allow for detailed cross-analysis. Experience indicates, however, that this does not necessarily mean that the resulting figures about administrative burdens are also accurate. The entrepreneurs surveyed, who as a result may either underestimate or overestimate the administrative burdens involved, interpret definitions of administrative activities differently. Therefore, the outcome of such studies has often given rise to criticism (OECD, 2001).

It appears that the variations between the answers, in terms of money, are often quite substantial (Allers 1994, Verwaal, 2000). The main reason for such large variations is that most entrepreneurs or their bookkeepers have different views about the way their firms are complying with the specific information obligations. In reality there will be marked differences in efficiency among the various firms. Moreover there is a serious risk that respondents will forget to consider the administrative burdens of trivial administrative activities like becoming familiar with the obligation, receiving the information, filing, etc. Finally, there is the risk of intermingling the administrative activities of one policy area with the administrative activities of another policy area or, even more serious, with those of the regular business administrative procedures. It is evident that the

<sup>1</sup> The content of this and the following subsections about the 'bottom-up approach' and strengths and weaknesses is derived from Van der Burg en Nijsen, 1998: 267-271.

results of an assessment like this are difficult to use, especially in case of monitoring administrative burdens.

Allers, talking about mail questionnaires and a 'top-down approach' said the following about this topic in his dissertation: 'In practice, however, compliance costs according to this definition<sup>1</sup> are not easily determined. Hence, estimates based on this definition as a rough guideline are the best we can produce. The entire discussion is largely academic, however, because the measurement of compliance costs, like the measurement of administrative costs (costs of enforcing institutes: addition AN), is such a complicated affair. As a result, error margins are considerable. Striving for a high level of sophistication when defining the exact borders of compliance costs is, therefore, a rather futile effort' (Allers, 1994: 32).

#### *The 'bottom-up approach'*

In the 'bottom-up approach' the basic principle is that a specific law or regulation is subjected to a detailed examination during which all information transfers and the accompanying administrative activities are unravelled. Therefore, the specific law or regulation is the measuring unit and not the individual enterprise, as is the case when using the 'top down approach'. The time involved with each activity and the function level at which it is carried out (the necessary qualification) are determined during an intensive multi-stage process of consultations and discussions - both individual and in groups - with experts from firms, accountants and also employers' and enforcing organisations. Information about the function level is needed because function levels can be related to enumeration and therefore the hourly wage-rate can be calculated. Instead of focusing on the considerable variations between individual firms the average or standard situation (based on an efficient way of carrying out the necessary administrative activities) and relevant exemptions (caused by differences in the specific legal obligations) to this standard situation (qua time needed/costs or qua number of firms) are determined.

#### *Strengths and weaknesses of the 'top-down' and 'bottom-up approach'*

Table 2.2 contains an overview of the strengths and weaknesses of the two approaches.

<sup>1</sup> Compliance costs are all those extra costs, which the entrepreneur must budget for simply in order to comply with tax requirements (Allers, 1994: 32). Allers is using the marginalist concept - only the extra cost - of administrative burdens; we prefer the integralist concept, viz all costs (Nijssen, 2000: 90-99). Allers' study focuses on taxation and public transfers. That's why he confines administrative burdens to tax requirements.

**Table 2.2 Strengths and weaknesses of the various methods**

<i>Relevant aspects</i>	<i>Top-down*</i>	<i>Bottom-up**</i>
Representativeness of sample of enterprises	+	-
Total scope of policy areas	+	-
Quick overview of administrative burdens by policy area	+	-
Ex-post assessment	+	+
Keys to solutions	-	+
Ex-ante assessment	-	+
Assessment of alternatives	-	+
Accuracy of results	-	+
Acceptation of results	-	+
Cost of research in one EU country	+	-
Cost of research in several EU-countries in case of harmonised legislation	-	+

\* *Based on a questionnaire. The enterprise is the measuring unit.*

\*\* *Based on expert interviews (or stopwatch-method) combined with group discussions. The specific law or regulation is the measuring unit.*

+ *= an advantage or strength.*

- *= a disadvantage or weakness.*

*Source: Van der Burg en Nijsen, 1998: 271.*

Mistral® is an exponent of the bottom-up approach. Hence, it is possible with the help of Mistral®:

- 1 to assess the extent of the administrative burdens for enterprises in one policy-area or for one legislation at a very detailed level and in an acceptably accurate way;
- 2 to carry out ex-ante evaluations of the administrative burdens for enterprises of a draft legislation and certain alternatives;
- 3 to find keys that can help to formulate strategies to reduce administrative burdens for enterprises in a certain policy area (useful policy instrument);
- 4 to receive commitment and approval from the various authorities (politicians, representatives of statutory organisations and representatives of employers' organisations) in the field;
- 5 to monitor the development of administrative burdens imposed by all laws and regulations on an annual basis.

## 3 When to apply Mistral®?

### 3.1 Introduction

Table 2.2 in chapter 2 illustrates that the 'bottom-up' approach to assess administrative burdens is good for ex-post assessments, ex-ante assessments and providing keys for solutions or alternatives. As we have seen, Mistral® is a kind of 'bottom-up approach'

Mistral® can be used to assess the administrative burdens of all existing laws and regulations ex-post and proposed and new laws and regulations ex-ante. There are no limits to the type of legislation that can be studied. Information obligations imposed on businesses are regulated mainly in administrative law. Up to the nineties the fiscal policy area was dominant in the research done on administrative burdens. As a consequence of deregulation policies, the interest in other policy areas as another source of administrative burdens for business is rising quickly. Examples of other policy areas, which create administrative burdens for businesses, are social security, ecology, and workplace conditions, etcetera.

In this chapter we shall discuss various applications of Mistral®, viz. quick scans (section 3.2), baseline measurements (section 3.3), advisory activities (section 3.4) and finally, the monitoring application (section 3.5).

### 3.2 Quick scans

Should a ministry want to implement a policy to reduce administrative burdens for businesses, information is required to distinguish which laws and regulations create administrative burdens. It appears that most ministries have difficulties in gathering this type of information.

The basic principle of Mistral® - administrative burdens are the cost of information transfers - is very helpful to scan the text of a large number of different laws and regulations for specific information obligations. Based on the Mistral® principles EIM, acting on the instructions of Actal (Advisory Committee Testing Administrative Burden), developed a methodology to allow large volumes of policy areas to be scanned very quickly for information obligations for business. The quick scan method entails the following steps:

- 1 Initial selection of relevant law items as separate parts of policy areas;
- 2 Further selection based on a first text scan of the remaining law items and clustering of these items into relevant topics;
- 3 Checking whether the selected law items entail information obligations for businesses (yes or no). The items classified as no are exit;
- 4 Brief description of the information obligations and the business population (type and size) that is involved in complying with the respective information obligations;
- 5 Calculating a rough estimate of the total administrative burdens of a specific law item for the relevant business population;
- 6 Making rough estimates of total administrative burdens for different types of firms (e.g. small and medium-sized and large firms), with special attention for variables referring to the number of messages (frequencies) and fixed and variable costs;
- 7 Classification of the selected law items into four categories of administrative burdens: law items a) with heavy administrative burdens for businesses, b) with me-

dium-sized or limited administrative burdens with a significant impact on specific types of firms, c) with medium-sized and limited administrative burdens for businesses and finally, d) without or with very limited administrative burdens for businesses.

As a result of the quick scan relevant, but still general, information referring to the distribution of the administrative burdens of the policy area under consideration is available about the various topics. Based on this information, EIM can advise the ministry that authorises the quick scan how to proceed. The next step might be a baseline measurement for e.g. the law items categorized under 7a) and 7b). A following step is necessary because the information resulting from a quick scan is too general to make decisions applying to a policy to reduce administrative burdens. After a quick scan we know which legislative items create many administrative burdens, but not why.

Quick scan assessments can also be very useful when information is needed about the administrative burdens of proposed or new legislation. In the Netherlands, but also in other countries like the UK, public officers are obliged to assess - among other effects - the administrative burdens of intended legislation. Quick scans, as we described them, are part of the system called BIAS, Business Impact Assessment System. In French speaking countries this instrument is called 'Fiche d'impact'.

### 3.3 Baseline measurements

One of Mistral's basic features is the capability to supply accurate output at a very detailed level for each article of the law individually. When and why do we need figures on administrative burdens at such a detailed and precise level? Basically, there are two situations where we need very detailed information about administrative burdens, i.e.:

- 1 when policy makers want to reduce administrative burdens for business by using specific measures;
- 2 when there is the need to set targets for the reduction of administrative burdens, in terms of percentages or in terms of money, to be achieved within a certain period of time.

When policy makers want to make serious efforts to reduce administrative burdens related to a specific item of law, they need to know which factors are predominant in causing the administrative burdens of that specific law. Is it the price of the message(s) or is it the quantity of the message(s), or both perhaps? And if it is the price of the message that causes the administrative burdens, which administrative activity necessary to produce this specific message is responsible for this? A detailed baseline measurement is needed to answer these questions in a satisfying way.

A government could decide to set targets to make the policy of reducing administrative burdens more realistic. The Dutch Cabinet did twice, in 1994 and in 1998; the target for the reduction of total administrative burdens for the time period 1994 to 2002 was set at minus 25%<sup>1</sup>. An annual monitoring system is needed to check whether the target

<sup>1</sup> In 1999 a reduction of administrative burdens of only a small 6%, referred to 1994, had been realized (Boog, Van der Burg, Van Croonenburg en Nijsen, 1999). For 2000 a minor reduction of administrative burdens was realised.



is being realised. The monitoring system will be explained later, but the detailed results of a baseline measurement are an indispensable foundation for monitoring.

A baseline measurement consists of the following stages:

- 1 defining the policy area or, within the policy area, the specific law in question;
- 2 desk research: making a full inventory of all the information obligations, the different messages, of businesses at the level of articles in the law;
- 3 presenting the list of messages to representatives (representing all interested parties) of relevant business circles and government to verify and to create support for the list of messages;
- 4 field research: collecting time and cost parameters in face-to-face interviews with specialists from businesses (bookkeepers) and accountants;
- 5 collecting frequency parameters (number of messages) in the relevant field; enforcing institutes like tax authorities, social insurance agencies, Central Bureau of Statistics, etc.;
- 6 standardizing administrative activities per message, time parameters and tariffs (hourly wages);
- 7 presentation of standardized results to experts and validation (to all interested parties) in the specific field of information obligations (bookkeepers, accountants and experts of the enforcing institutes);
- 8 input of validated parameters in Mistral®;
- 9 running Mistral® software to calculate the administrative burdens;
- 10 presentation of the results in a report or by releasing them on a CD-Rom.

The results of a baseline measurement are the administrative burdens of businesses in terms of money:

- a. for the specific policy area or parts of it;
- b. for all the separate messages within the policy area;
- c. per message, for all the separate administrative activities.

The results of a baseline measurement provide an excellent foundation to give advice about initiatives to reduce administrative burdens for businesses (see section 3.4) and for monitoring the effects of these policies (see section 3.5).

### **3.4 Mistral® as an advisory instrument**

Based on the results of baseline measurements public officers can be advised about the possibilities for reducing the administrative burdens in (part of) specific policy areas. An interesting example of the impact baseline measurements have on plans to reduce administrative burdens is the Dutch Cabinet's letter of May 2001 referring to the development of the administrative burdens for the various policy areas and the action programmes of almost all departments to reduce administrative burdens on business in the future. Most action programmes are based on baseline measurements of the administrative burdens in specific policy areas (Letter from the Ministers of Economic and Legal Affairs, 2001).

### **3.5 Monitoring instrument**

Monitoring administrative burdens for businesses is meaningful only when the monitor focuses on the total administrative burdens at macro level for all policy areas. When a monitor includes only selected policy areas it is never clear what is happening in the

excluded policy areas. Unknown but existing negative effects in the policy areas that have been excluded from the monitor might overrule positive results of a partial monitor, a significant reduction of the administrative burdens for businesses.

Do we need to repeat baseline measurements for all relevant policy areas each year?

This would be an enormous waste of money. There is a better solution.

The greatest strength of a baseline measurement is that all relevant parameters that create the administrative burdens of a specific law are available. This information is available at the most detailed level: per article of the law, per message and per administrative activity that is necessary to produce this message. The only information we need to monitor the development of the administrative burdens in the next year is about the parameters that have changed since the year of the baseline measurement. Desk research usually suffices for monitoring the development of administrative burdens. Only in case of major changes in the law a new baseline measurement will be necessary.

Since Mistral® contains prices and quantities of messages, for monitoring we need to ask questions about the mutations in the prices of the messages and the frequencies of the messages. Both prices and frequencies might acquire different values with respect to the baseline year as a consequence of:

- 1 changes in the law, and
- 2 changes in the economy.

Changes in the law are, of course, the most relevant factor when monitoring administrative burdens in order to evaluate the effects of policies aiming to reduce the administrative burdens for business. Changes in the economy refer to mutations in the number of businesses, the number of employees and the wage rate. In addition, prices of messages might adopt different values if there are changes in the administrative infrastructure, i.e. the percentages of outsourcing and the degree of computerization.

## 4 Mistral®: how does it work?

### 4.1 Introduction

We have explained why we need an instrument like Mistral® (chapter 2) and when this should be applied (chapter 3). Now a more detailed explanation of the Mistral® instrument itself will be given. We will do this by describing a baseline measurement. A baseline measurement entails all relevant elements of Mistral®. After the presentation of some background information in section 4.2, section 4.3 will discuss the different inputs Mistral® needs. The processing of Mistral® will be described in section 4.4. An illustration of the type of output will be given in section 4.5.

### 4.2 Definitions and concepts

Some background knowledge can be helpful to obtain a better understanding of the problems, which arise when measuring administrative burdens. Therefore, in this section we will start to present some definitions and concepts in section 4.2. Subsection 4.2.1 contains a description of the definition of administrative burdens. One important element of Mistral® is the concept of standardised categories of administrative activities and standardised times necessary to carry out this administrative activities. This concept will be discussed in subsection 4.2.2. The section concludes, in subsection 4.2.3, with a description of CASH, the classification system of administrative activities.

#### 4.2.1 *Definition of administrative burdens*

The cost of complying with information transfer obligations for enterprises, the so-called administrative burdens, can be divided into structural or regular (annual) and one-off costs.

Structural administrative burdens are the integral costs of the annually recurring administrative activities connected to complying with the obligation to transfer information, as specifically stipulated in the regulation applying to businesses operating in a specific country to the government or comparable body of that country, which obligations businesses cannot ignore without offending against the law. The government or comparable body of that specific country uses the information thus obtained to check and maintain compliance with content obligations deemed by society to be of value.

The definition of one-off administrative burdens is identical to that of structural administrative burdens, as long as it is remembered that this applies only to situations in which there are major changes to existing laws and regulations, or new laws and regulations (Nijsen, 2000: 104-105).

Administrative burdens consist of:

- a. the cost components:
  - wage/salary costs and/or the assessed wage of the entrepreneur
  - cost of the computers, software, etc. used
  - allowance for overheads;when the businesses themselves execute the transfer of information;
- b. the cost of out-sourcing, if the businesses out-source the execution of the transfer of information (Nijsen, 2000: 104).

Administrative burdens are the costs of legally obliged information transfers from businesses to government or enforcing institutes and vice versa. Information transfers are called messages and the number of messages, required in a year, is called the frequency. Administrative burdens exist simply because producing messages takes time and money. This concept is the basic principle of Mistral® and will be elaborated in a more technical way (formulas) in chapter 5.

#### 4.2.2 *Standardised administrative activities*

One of the features of the Mistral® methodology is the concept of the so-called standardised administrative activities. Why do we need such a concept when assessing the administrative burdens of businesses?

Administrative burdens are influenced by exogenous as well as endogenous determinants. Individual businesses could not influence exogenous determinants, but they could do so regards the endogenous ones (Allers, 1994; Nijsen, 2000; Verwaal, 2000). Exogenous determinants are primarily law related and endogenous determinants are primarily related to internal processes of businesses. Examples of exogenous determinants are the decision process in Parliament to issue information obligations for businesses, the design of these obligations, differences in definitions between policy areas, changes in regulations etcetera. Examples of endogenous determinants are the degree of efficiency of business administrations, the choice to hire extremely expensive external advisors, the decision not to comply with information obligations etcetera (Allers, 1994; Nijsen, 2000).

To detect and avoid undue administrative burdens is the main objective of research and accompanying policy related to administrative burdens. It is important to realise that administrative burdens are relevant in terms of policy only when they are undue from the point of view of the law. Or, in other words, only in those cases where the undue administrative burdens are exogenous from the point of view of the individual firm. Undue endogenous administrative burdens, the consequence of inefficiencies at firm level, are irrelevant in this respect.

To make sure the focus of Mistral® is on exogenous determinants, firstly we have chosen the methodology of standardisation of administrative activities when carrying out specific information obligations. Standardisation of administrative activities implies that, for each separate information obligation, a blue print is being made of how to deal with the administrative requirements of this obligation. Experts, such as bookkeepers and accountants or other specialists, involved in carrying out the specific information obligation are consulted when making these blue prints of standardised administrative activities. Secondly, based on expert interviews, the time necessary to carry out every separate administrative activity is being standardised according to 'average efficient practice'. The data resulting from these steps - standardising activities and time necessary per activity - are registered in CASH. For an explanation of CASH, see next subsection.

#### 4.2.3 *Classification System Administrative Activities (CASH)*

CASH, is the acronym of **C**lassification system of **A**dministrative **A**ctivities (Activities are 'Handelingen' in Dutch). The basic idea of CASH is that administrative activities are of a rather generic nature. They are not very specific for policy areas, information obligations, and messages and not for enterprises in different industries or different size classes. The processes of becoming acquainted with what information government needs, gathering this information, asking for advice, making calculations and checking them,

them, filling in documents, sending them to government or enforcing institutes, filing documents etcetera are rather similar for most policy areas and enterprises. What differs is the time the different administrative activities take, depending on the type of activity. In general, obtaining advice takes much more time than filing a document. Another important difference between the various types of administrative activities is the qualification level that is needed to carry out the specific activities. Checking calculations needs more expertise than filing or sending a document. So the necessary time and qualification level may vary for different administrative activities.

Based on various Mistral® projects, EIM compiled the database CASH containing many administrative activities, including the time needed for each activity necessary to produce the various messages in the different policy areas. Today, this database contains thousands of different administrative activities, all of which have been clustered into fourteen basic administrative activities as shown in table 4.1. Analyses have indicated that within the fourteen categories the variations in time necessary to carry out this specific administrative activity were considerable. To acquire more homogenous categories of administrative activities, we added the dimension simple, average and complicated for each activity.

**Table 4.1 Administrative activities according to CASH by category of complexity (in round minutes)**

<i>No.</i>	<i>Description</i>	<i>Simple</i>	<i>Average</i>	<i>Complicated</i>
1	Becoming/remaining familiar with the information obligation	1	10	21
2	Receiving the information	1	2	3
3	Collecting the required information	1	6	19
4	Judging whether the information obligation is applicable	2	6	15
5	Filling in or entering the required information	1	5	9
6	Making calculations or assessments	2	5	12
7	Printing out the results of the calculation	0	3	5
8	Checking and possibly correcting the results	1	12	69
9	Obtaining advice	2	20	100
10	Consultation	0	10	34
11	Explanation	1	14	54
12	Executing the instructions to pay	1	4	5
13	Sending the information, the message	1	1	5
14	Filing the data	1	2	2

*Source: EIM.*

If, for various reasons, field research is not necessary or not possible, CASH can facilitate research on administrative burdens. By consulting CASH, new messages can be built, including the necessary administrative activities and the time needed to carry them out.

### 4.3 Input of the model

To use Mistral® for a baseline measurement the following inputs are required:

- 1 a precise description of the relevant policy area, for instance, the social insurances for employees;
- 2 the percentage of business outsourcing the compliance of the obligations for businesses of this specific policy area and the degree of computerization;<sup>1</sup>
- 3 a detailed list of validated information obligations for businesses by relevant article of the policy area of pay roll tax. These information obligations are called messages e.g. the annual statements for each individual employee;<sup>2</sup>
- 4 For every single message, the validated number of times the message has to be sent all year round (monthly, quarterly, annually or depending on some event like hiring or firing). This is the so called the 'periodicity' of a message;
- 5 For each single message the number of entities sending that specific message in all relevant industries on an annual base. For instance, in the annual statement for each single employee, the number of entities equals all employment for all firms in all relevant industries in a specific year. The number of entities multiplied with the periodicity (see 4) is called the frequency of a message;
- 6 For each single message, a detailed and validated description of the standardised administrative activities necessary to produce this message;
- 7 For each single administrative activity necessary to produce a specific message, the validated necessary time in minutes and validated hourly wage rate, depending on the qualification levels.

### 4.4 Processing the model

Once the input data have been collected, the software of Mistral® executes the necessary calculation processes.

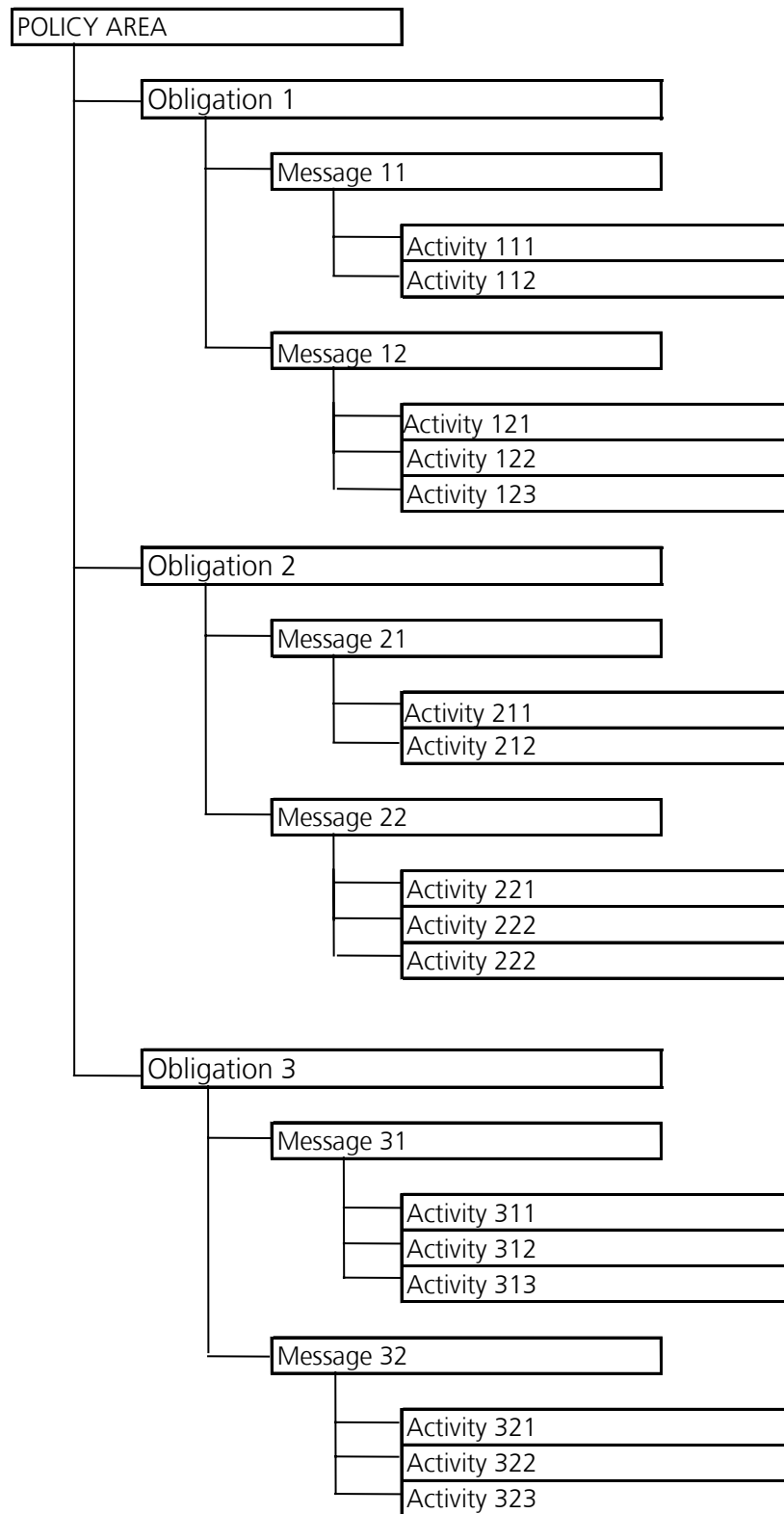
Mistral® runs two separate calculations for each single policy area; one for all the messages sent by the businesses themselves and one for all the messages outsourced by the businesses. In each single policy area weighting with the percentage of outsourcing combines the results of these two separate calculations. The following description of the calculation procedure applies both for businesses that send messages themselves and also the messages that are outsourced.

Mistral® starts the calculation of the administrative burdens of a specific policy area from the bottom, at the level of every single administrative activity (see chart 2). Each single administrative activity belongs to a specific message. For every single administrative activity we know the frequency, the necessary time in minutes and the tariff. By multiplying quantity (frequencies) x price (time x tariff) the administrative burdens of each single message are calculated in terms of money. Adding up the administrative burdens, in term of money, for all the messages in the specific policy area gives as result the total administrative burdens of that policy area. The next step is to combine the administrative burdens, in terms of money, for all separate policy areas to one macro figure that represents the aggregate administrative burdens for all policy areas together.

<sup>1</sup> In items 3-7 the same holds both for businesses that comply themselves and for businesses outsourcing compliance with the obligations.

<sup>2</sup> In some cases there may be sub-messages e.g. a special item in the annual statement which is not applicable for each individual employee. All remarks related to messages hold for sub-messages too.

Chart 2      Structure of the Mistral® process



## 4.5 Output of the model

Table 4.2 shows a dummy, demonstrating the type of results a regular baseline measurement that Mistral® will produce. Most striking is the detailed level of the results. For each message there is information available about the pattern of administrative activities necessary to produce that specific message. Also available per administrative activity are the number of entities, the periodicity, the necessary time and the tariff depending on qualification. Based on this information the administrative burden per activity is provided and, using addition also the administrative burdens for every single message. To calculate the administrative burdens for an entire policy area or for all policy areas together is only a small final step in the total calculation of Mistral®. These detailed results provide an excellent foundation for making policy to reduce administrative burdens and to monitor the results of such types of policy.



Dummy: Table 4.2 Administrative burdens by policy area

<i>Policy area/messages</i>	<i>Frequencies</i>	<i>Time in minutes</i>	<i>Tariff €</i>	<i>Burden per activity/ message €</i>	<i>Total administrative burden €</i>
Payroll tax					
– message 1					
administrative activity a					
administrative activity b					
administrative activity c					
etc.					
– message 2					
– message 3					
– etc.					
total area					
VAT					
– message 1					
– message 2					
– message 3					
– etc.					
total area					
Annual Account					
– message 1					
– message 2					
– message 3					
– message 4					
– etc.					
total area					
Policy area x					
Policy area y					
Policy area z					
All policy areas					



## 5 Description of Mistral® in detail

### 5.1 Introduction

This chapter contains a technical description of the way in which the (financial) administrative burden private businesses have to bear is calculated within the framework of Mistral®. Mistral® gives an estimate of how the administrative burden of private businesses varies between policy areas. The equations for determining the administrative burden are presented in sections 5.2 and 5.3. Section 5.4 describes various ways in which the administrative burden can be presented. Finally, Annex I lists all variables used in these sub-sections.

### 5.2 Decomposition into a number of messages

In broad lines we can distinguish two steps in determining the administrative burden imposed upon private businesses. First, it is determined how many ‘messages’ are necessary to comply with all information obligations stated in the law. Subsequently, in the next section, the costs per message are determined.

Dutch legislation comprises various policy areas. For each of these policy areas  $p$  the level of administrative burden  $AB_p$  can be determined. The total level of administrative burden is the sum of all administrative burdens for all policy areas (there are  $n_p$  policy areas):

$$AB = \sum_{p=1}^{n_p} AB_p$$

This is the total level of administrative burden in the Netherlands. The level of the administrative burden for a policy area is the cost of all the obligations set forth in that particular policy area. Assume that there are  $n_{po}$  obligations in policy area  $p$ . The administrative burden of the  $o^{th}$  obligation is denoted by  $Cost(Obligation_{po})$ .

$$AB_p = \sum_{o=1}^{n_{po}} Cost(Obligation_{po})$$

The cost of obligation  $o$  is the sum of the costs of all messages associated with this obligation that have to be sent to the government. It is assumed that there are  $n_{pom}$  messages<sup>1</sup> associated with obligation  $o$ . The cost of a single obligation is:

<sup>1</sup> Some of the messages are composed of sub-messages. Not every obligation has the same consequences for all businesses. In that case we have sub-messages with differing costs expressing these differences. The cost of a sub-message is determined in the same way as the cost of a message in the main text. As a result, the cost of a message with sub-messages is then the sum of the cost of all sub-messages. This element is ignored in the main text to make the description not unnecessarily burdensome.

$$Cost(Obligation_{po}) = \sum_{m=1}^{n_{pom}} Cost(Message_{pom})$$

### 5.3 Decomposition of the costs of a message

The cost of message  $m$  due to obligation  $o$  in policy area  $p$ , is:

$$Cost(Message_{pom}) = \sum_{a=1}^{n_{poma}} (InternalCost_{poma} + ExternalCost_{poma})$$

where:

$$InternalCost_{poma} = (1 - \alpha_{poma}) \cdot Frequency_{poma} \cdot InternalTime_{poma} \cdot \frac{InternalTariff_{poma}}{60}$$

and

$$ExternalCost_{poma} = \alpha_{poma} \cdot Frequency_{poma} \cdot ExternalTime_{poma} \cdot \frac{ExternalTariff_{poma}}{60}$$

It is assumed that we have  $n_{poma}$  activities associated with message  $m$ . Composing a message is the result of a number of administrative activities. These include gathering the requested information, typing a document containing the information, sending the document to the government and finally, making a copy of the document to file it for future reference.

The internal and external cost of message  $m$  is the product of the number of times the activity is carried out, multiplied by the time required to carry out the activity and finally, multiplied by the appropriate tariff in terms of money per minute of the person carrying out the activity. The constituent parts of these equations are discussed in the following sub-paragraphs.

#### 5.3.1 Proportion of outsourcing

Some businesses prefer to outsource part or all of these activities. Small businesses lack for instance the qualified personnel to perform certain (administrative) tasks. The personnel working for this business are mainly engaged in the core activity of the business, which can be quite different from an administrative activity. In that case, it is likely to be cheaper to hire an external expert, who can then perform the necessary tasks. We end up with two types of costs, the internal cost for those activities that are carried out within the business and the external cost which constitute the payments made by private businesses towards other businesses performing the outsourced activities. For each activity we introduce the proportion of outsourcing  $\alpha_{poma}$ . The value of  $\alpha_{poma}$  will be close to one for policy areas, which mainly affect mainly small businesses. Larger businesses will have specialized personal to carry out these activities and the  $\alpha_{poma}$ -value for policy areas influencing mainly larger firms will be close to zero. There are also arguments for smaller firms to outsource to a larger extent even if it is more expensive than having someone within their own businesses to carry out this task. It relieves the entrepreneur of the burden of filling out forms for the Internal Revenue Service (IRS). It

also relieves him of the burden of doing this without making any mistakes that could otherwise lead to legal steps by the IRS.

### 5.3.2 Frequency

Each activity is carried out  $Frequency_{poma}$  times a year and therefore, the number of times the activity is carried out within the firm is one minus the proportion of outsourcing times the frequency. The number of times the activity is carried out by an outside business is the proportion of outsourcing times the frequency.

The frequency itself is dependent on the so-called periodicity and number of reporting entities. The periodicity is the number of times per year a message has to be sent to the government. For instance, once a year or every quarter year, so four times a year. These messages have to be sent by each business itself, or for each employee working in that business. The reporting entities are respectively, all businesses that have to send the message or all employees for whom this message has to be send. The number of businesses or employees is then the number of reporting entities. By multiplying the periodicity by the number of reporting entities:

$$Frequency_{poma} = Periodicity_{poma} \cdot NumberOfEntities_{poma}$$

we arrive at the frequency, or total number of messages that have to be send to the government in a particular year.

### 5.3.3 Internal and External Time

It takes  $InternalTime_{poma}$  minutes to carry out this particular activity if it is done within the business itself. An outside business performs the same activity in  $ExternalTime_{poma}$  minutes.

### 5.3.4 Internal and External Time

The internal tariff for the activity when it is executed within the business itself is the amount of money per hour, divided by 60. This tariff is denoted by  $InternalTariff_{poma}$ . The external tariff is  $ExternalTariff_{poma}$  and it is the tariff when the activity is outsourced. The internal tariff is the labour cost including a percentage for overhead costs. The labour cost is composed of the gross wage rate of the person carrying out the activity and a number of surcharges. Surcharges comprise paid holidays, all sorts of emoluments, pension contributions, etc. The percentages used for each of the surcharges are based on wage cost research conducted by EIM based of CBS-material. EIM has adapted the material to up-date the CBS material. When outsourcing is preferred, the going rate for hiring outside help is normally higher than the wage rate if the activity were carried out within the business.

## 5.4 Presenting the level of administrative burden

The administrative burden for all policy areas or one particular policy area can be presented as the total level of the administrative burden in terms of money,  $AB$ , respectively as  $AB_p$ . The total level of the administrative burden can also be presented as a

percentage of total value added valued at factor costs ( $VA$ ):

$$AB_{perc} = \frac{AB}{VA} \cdot 100\%$$

Presenting it this way makes clear what part of value added is used to comply with information obligations by the industries involved. It may even be presented for each possible combination of size class and industry.

## 6 Breakdown into industries and size classes

### 6.1 Introduction

Having determined the overall level of administrative burden for the various policy areas, it is interesting to find the answers to the questions: what is the administrative burden for businesses within a certain industry and within a certain size class? How are businesses in the various industries of the economy affected? Is the size class to which the firm belongs also important concerning the level of the administrative burden it has to bear?

The determination of the level of administrative burden as described in chapters 4 and 5 is a methodology to assess results at a macro level, i.e. the administrative burden per policy area. Data are collected at activity level to determine the cost of an administrative action. The administrative burden is the sum of the cost of all administrative activities. The data collected to perform these calculations are representative data for all businesses involved. Researchers weigh, for instance, the internal tariffs they have collected to arrive at a representative internal tariff.

In addition to the macro approach, a special feature of Mistral® is the breakdown of the macro results into size class and industry. Three size classes are considered in Mistral: businesses with no or up to ten employees, between ten and a hundred employees, and hundred or more employees. Within the fourteen industries that are being considered we have fifty-two size class and industry combinations. Following the bottom-up approach researchers would have to estimate, for all activities within a certain policy area, the data needed to perform the calculations for all fifty-two combinations. It is clear that this would dramatically increase the cost of carrying out such research.

In this chapter we use a different approach. The level of administrative burden for a certain policy area will be divided among industries and size classes in order to achieve results at meso level. This division is made taking into account differences between businesses active in various industries and of various size classes. The approach is described as having three steps. The first step is to breakdown the administrative burden based on what entity is affected primarily by the legislation for each policy area - businesses or employees, for instance. Based on the distribution of these entities over the size classes and industries that are considered, we have a first rough estimate of the administrative burden for each size class and industry combination. Then there is also information about the size class and industry combinations that are not, or to a lesser, extent affected by legislation in a particular policy area because of the specific scope of that legislation. In the second step using this information improves the estimate made in the previous step. In the third step we consider differences in internal and external rates and tariffs, proportions of outsourcing and internal and external times, between size class and industry combinations to improve the estimate obtained in the second step even further.

As in the previous chapter we can present, in an additional step, the extent of the administrative burden for each size class and industry combination as either an amount of money or as a percentage of the value added for that particular size class and industry combination. The steps regarding the breakdown into industries and size classes are discussed in detail in the following sections. The demonstration of the breakdown ef-

fects of the different steps is founded on baseline measurements i.e. the administrative burdens for selected policy areas (section 6.2).

## 6.2 Baseline measurement selected policy areas: bottom-up approach

We start with the baseline measurements for six selected policy areas. The policy areas involved are the payroll tax including specific general insurances connected to payroll tax, employees' social insurances, income tax, corporate and dividend tax, VAT and finally, the Annual Accounts. These policy areas account for about 50% of total administrative burdens of all policy areas in the Netherlands. Table 6.1 shows the administrative burdens borne by businesses to comply with the transfer of information obligations applying in these specific policy areas. In 2000 the administrative burdens for these six policy areas amounted to over 4 billion euros. Annual Accounts proved to be the most burdensome policy area; corporate and dividend tax imposed fewest burdens.

**Table 6.1 Administrative burdens on businesses for selected policy areas in the Netherlands, 2000, euros (x 1,000,000)**

<i>Policy area</i>	
Payroll tax and general social insurances*	722
Employees social insurances	630
Income tax	444
Corporate and dividend tax	248
VAT	673
Annual Accounts	1,623
Total	4,341

\* Retirement, widows and orphans pension schemes, General Health insurance.

These administrative burdens were determined bottom-up without taking size class and industry differences into account, except when estimating representative numbers for the proportion of outsourcing, internal and external rates and tariffs, for all size class and industry combinations.

To make the various steps taken in the next sections easier to understand table 6.2 illustrates the way in which entities are influenced by the various policy areas.



**Table 6.2 Administrative burdens incurred in 2000 due to statutory info-transfer obligations in selected policy domains**

<i>Policy areas</i>	<i>Total administrative burden in million euros</i>	<i>Entities</i>			
		<i>all enter- prises</i>	<i>employ- ees only</i>	<i>self- employed only</i>	<i>corporate firms only</i>
Payroll tax and general social insurances*	722	72**	650	-	-
Employees social insurances	630	63**	567	-	-
Income tax	444	-	-	444	-
Corporate tax and dividend tax	248	-	-	-	248
VAT	673	673	-	-	-
Annual account	1,623	-	-	-	1,623
Total	4,341	808	1,217	444	1,872

\* Retirement, widows and orphans pension schemes, general health insurance.

\*\* Only enterprises with employees.

From table 6.2 it appears that the policy areas payroll tax and employees' social insurances impose administrative burdens only on enterprises with employees. Only self-employed have to comply with the information obligations of the policy area income tax. This means that all administrative burdens applying to this specific policy area are imposed only on this category, not to corporate firms. Corporate and dividend tax and the Annual Accounts, on the contrary, affect only to corporate firms. Finally, the information obligations of policy area VAT are relevant to all enterprises. To conclude, for a corporate firm with employees the administrative burdens are particularly severe, when the six policy areas mentioned earlier are considered.

### 6.3 First approximation: entities affected

Based on the distribution of the entities (mentioned in section 6.2) among the size classes and industries under consideration, we arrive at a first rough estimate of the administrative burden for each size class and industry combination. To some extent this step looks more closely at the number of the different entities for all size class and industry combinations (see Annex II) instead of one representative figure for each entity of all the businesses involved. See table 6.3.

**Table 6.3 Administrative burdens for businesses in selected policy areas according to size class and industry, according to entities (first stage); the Netherlands, 2000, euros (x 1,000,000)**

<i>Industry</i>	<i>Small firms</i>	<i>Medium sized firms</i>	<i>Large firms</i>	<i>Total</i>
Agriculture	255	4	1	260
Mining	3	1	2	6
Manufacturing	216	175	128	519
Electricity, water, gas	1	1	9	10
Building	259	137	35	431
Repair and trade	758	236	113	1,107
Hotel, catering	162	42	14	218
Transport, communication	122	73	64	259
Financing, insurance	105	19	56	180
Real estate, business to business	779	138	174	1,091
Health and welfare	132	17	81	230
Culture, sports and broadcasting, TV	25	3	1	29
All private industries	2,816	846	678	4,341

From table 6.3 it appears that as a preliminary result of the first step, small firms (0-9 employees) are affected most by the administrative burdens of the selected six policy areas; 65% of 4.341 million euros. The percentages for the medium sized (10-99 employees) and the large firms are 19 and 16 respectively. These results are easy to understand. As shown in table 6.2, 90% of total administrative burdens is related to the entities enterprise, self-employed and corporate firms. Only 10% of the total administrative burden is employees related. Since most firms are small ones (92%) and almost all self-employed are small firms, the greater part of administrative burdens is imposed on small firms.

When considering industries, 50% of total administrative burdens are borne by just two small-scaled industries i.e. repair and trade, and real estate, business-to-business services. The most relevant explanation for this is that a relatively large share (46%) of all firms and self-employed (40%) are located in these two industries. In addition almost 59% of all corporate firms and 44% of all employees belong to these two industries.

But more elements will need to be considered to obtain a better assessment of the breakdown of administrative burdens into industries and size classes. The next step corrects for the scope of policy areas (see section 6.4).

## 6.4 Correction for scope of policy area

This second step improves the estimate made in the first step by considering how businesses in the various size class and industry combinations are affected by the scope of the legislation. This is done at the level of information obligations. One can assume that some businesses are affected by legislation because of their size or because they have more than a minimal number of employees. Other businesses are not affected by that same piece of legislation. The corresponding number of entities of the information obli-

gations involved for these businesses for that particular size class and industry combination is set equal to zero. Positive number of entities are found only for those size class and industry combinations that meet the requirements as described within the legislation of that policy area or can be deduced using common sense. In this step, therefore, the level of administrative burden to comply with each information obligation is broken down into size class and industry combinations, based on the number of entities for all size class and industry combinations, and on the scopes of the various policy areas.

**Table 6.4** Administrative burdens on businesses in selected policy areas according to size class and industry, based on entities and scope of regulation (second stage); the Netherlands, 2000, euros (x 1,000, 000)

<i>Industry</i>	<i>Small firms</i>	<i>Medium sized firms</i>	<i>Large firms</i>	<i>Total</i>
Agriculture	193	5	2	199
Mining	2	1	2	5
Manufacturing	335	238	247	820
Electricity, water, gas	0	1	10	11
Building	189	148	66	403
Repair and trade	813	252	148	1,213
Hotel, catering	125	41	19	184
Transport, communication	91	73	81	244
Financing, insurance	78	18	55	151
Real estate, business to business	567	134	197	898
Health and welfare	96	15	76	187
Culture, sports and broadcasting, TV	20	3	1	24
All private industries	2,510	929	902	4,341

The preliminary results of stage 2 (table 6.4) differ from those of stage one. Firstly, administrative burdens for small firms dropped by 11% (from 2.816 million euros to 2.510 million euros). This is the balanced result of a reduction of administrative burdens by about 23-27% for all small firms, except small firms in manufacturing (+ 55%; from 216 to 335 million euros) and small firms in repair and trade sector (+ 7%; from 758 to 813 million euros). As a consequence, the administrative burdens went up in the medium-sized (+ 10%; from 846 to 929 million euros) and especially in the large firms (+ 33%; from 678 to 902 million euros). Most striking are the changes in administrative burdens for the large firms in manufacturing (+ 93%; from 128 to 247 million euros) and in the building sector (+ 87%; from 35 to 66 million euros). The main explanation for this shift in administrative burdens among industries and size classes is the appearance of industry specific employee-related information obligations belonging to the policy areas of payroll tax and employees' social insurances. In complying with the information obligations of these two policy areas enterprises have to perform many administrative activities for "special allowances". Examples of such types of remuneration are allowances for shift work, guard duties, inconvenient and/or dangerous work and wages-in-kind. Manufacturing firms, especially the large ones, are within the scope of all these particular types of information obligations. In addition, special allowances are rather common in

the building and transport sectors and the health sector. Additional, industry- specific employee related information obligations are applicable in the building sector, for instance information obligations related to loss of working hours due to bad weather conditions.

## 6.5 Corrections for differences in rates and tariffs

To improve even further the estimate obtained in the previous stage the final step takes into account differences in internal and external rates and tariffs between size class and industry combinations due to outsourcing. Most small firms lack the expertise to perform the administrative activities connected to the information obligations of most policy areas and therefore they outsource this administration. Rates for outsourced administrative activities differ from internal rates. In most cases, external tariffs are higher than internal rates. This means that the administrative burdens of outsourced information obligations are more costly than the administrative burdens of activities undertaken internally. On the other hand, labour costs in small firms are lower than labour costs in large firms. This implies that the internal tariffs in small businesses are lower than the internal tariffs in larger businesses. Besides, internal and external rates differ according to policy area. More experience is needed for administrative activities when preparing the Annual Accounts, for instance, than for activities connected with payroll tax. Refer to Annex III for more detailed information about percentages of outsourcing and tariffs.

Tariff correction is based on a number of assumptions. First it is assumed that the cost of each individual administrative activity is the same for all activities within a certain policy area. Furthermore, it is assumed that the cost of administrative activities is the same for all businesses within a certain size class and industry combination. Because there are only rough estimates about, for instance, the proportion of outsourcing for the three size classes that are considered within this research, it should be understood that the estimate of the administrative burden is improved only at the level of all industries. There is no estimate that also considers the fourteen industries. Furthermore, we consider the administrative burden only at the highest level, the policy area. The error made will be small compared to performing these calculations at information obligation level, because it is assumed that all activities are comparable. An additional benefit is that this reduces the number of calculations considerably. It is questionable whether performing these calculations at a lower level would improve the results obtained. Any improvement would be artificial as we lack information on this subject.

When correcting for the differences in rates and tariffs, it is assumed that the calculations performed in a previous step used a tariff that is the same for all businesses within the various size class combinations. The level of administrative burden is first divided by this tariff and then the administrative burden for a certain size class is re-calculated using a tariff that is specific for that particular size class. In determining the tariff for each of the size classes under consideration, differences in rates of outsourcing and differences in internal and external tariffs between size classes are taken into account.

The following tables show the varying degrees of outsourcing (table 6.5) and the various rates and tariffs (table 6.6).

**Table 6.5 Percentages for degrees of outsourcing according to policy area and size class; the Netherlands**

<i>Policy area</i>	<i>Small enterprises</i>	<i>Medium sized enterprises</i>	<i>Large enterprises</i>	<i>Total</i>
Payroll tax and general social insurances*	85	30	10	80
Employees social insurances	85	30	10	80
Income tax	90	90	90	90
Corporate tax and dividend tax	87	70	30	85
VAT	0	0	0	0
Annual account	67	50	20	65

\* Retirement, widows and orphans pension schemes, general health insurance.

**Table 6.6 Average tariffs\* for administrative activities per policy area in the Netherlands, euros per hour**

<i>Policy area</i>	<i>Small enterprises</i>	<i>Medium sized enterprises</i>	<i>Large enterprises</i>	<i>Total</i>
internal tariffs				
Payroll tax and general social insurances**	29.50	29.50	33.12	31.76
Employees social insurances	29.50	29.50	33.12	31.76
Income tax	29.50	36.30	54.45	29.49
Corporate tax and dividend tax	29.50	36.30	54.45	38.57
VAT	29.50	40.84	63.52	31.76
Annual account	29.50	36.30	81.67	45.37
External tariffs				
Payroll tax and general social insurances*	32.67	43.10	63.52	39.02
Employees social insurances	32.67	43.10	63.52	39.02
Income tax	56.72	68.06	79.40	56.72
Corporate tax and dividend tax	61.25	90.74	136.12	69.87
VAT	-	-	-	-
Annual account	77.13	113.43	181.49	90.74

\* Labour costs inclusive overhead costs.

\*\* Retirement, widows and orphans pension schemes, general health insurance.

It appears that, as a result of the correction for differences in degree of outsourcing and differences in internal and external tariffs, the preliminary results of stage 2 (see table 6.4) change again. The administrative burdens for small firms decrease on average by 8%, whereas medium-sized and large firms show an average increase of administrative burdens of respectively 5 and 17%. The final results will be shown in section 6.6 and again in more detail in chapter 7. These effects are the balanced results of:

- The higher degree of outsourcing for the small firms on the one hand and;
- The lower internal and external tariffs for small firms on the other hand, compared to medium-sized and large firms.

## 6.6 Evaluation

Table 6.7 contains the results of all three stages. The most important result of the three correction stages is that the administrative burdens shifted from the small firms not only to the medium-sized, but in particular to the large enterprises. This shift is caused mainly by two factors. Firstly, and that is demonstrated in the second stage, employee related industry specific information obligations regarding special allowances are particularly burdensome for large manufacturing enterprises. Secondly, the higher internal and external tariffs result in higher administrative burdens for the large firms.

**Table 6.7 Administrative burdens for businesses in selected policy areas according to size class, entities, scope of regulations and tariffs; the Netherlands, 2000 (in billion euros and ratios)**

<i>Policy area</i>	<i>Small enterprises</i>	<i>Medium sized enterprises</i>	<i>Large enterprises</i>	<i>Total</i>
euros				
First approximation: entities affected	2,816	846	678	4,341
Second stage: correction for scope	2,510	929	902	4,341
<b>Third stage: correction for tariffs: final results</b>	<b>2,307</b>	<b>978</b>	<b>1,056</b>	<b>4,341</b>
Ratios				
First approximation: entities affected	0.65	0.19	0.16	1.00
Second stage: correction for scope	0.58	0.22	0.20	1.00
<b>Third stage: correction for tariffs: final results</b>	<b>0.53</b>	<b>0.23</b>	<b>0.24</b>	<b>1.00</b>

## 7 Some results obtained using Mistral®

### 7.1 Introduction

This chapter contains some results obtained by using Mistral®. This demonstration starts by presenting the macro results of a baseline measurement of just one policy area i.e. employees' social insurances. The next section discusses the policy area employees' social insurances and the way in which the administrative burden is determined bottom-up. There is no distinction within this description between size classes and industries. This section parallels Chapter 5. In section 7.3 the meso results of the six selected policy areas are described for each size class and industry combination (as discussed in Chapter 6).

### 7.2 Macro results policy area employees' social insurances

#### 7.2.1 Introduction

Employees' social insurances are related to the risks of loss of income the consequence of unemployment, sickness (short term disablement of one year) and long-term disablement (unable to work, more than one year). Every employer has to comply with many transfer of information obligations within the framework of this policy area. In sub-section 7.2.2 the administrative burdens of all related messages will be discussed. Sub-section 7.2.3 concentrates on the administrative burden of just one message 'inspection by enforcing institutions'. In the same sub-section the way Mistral® calculates the effects of a certain policy to reduce administrative burdens will be explained.

The administrative burdens shown in this section were determined bottom-up, as described in chapter 5, without taking size class and industry differences into account except for estimating representative numbers for the proportion of outsourcing, internal and external tariffs etc. for all size class and industry combinations.

It is also important to emphasise that the administrative activities of the policy area employees' social insurances are highly interwoven with other administrative activities of a related policy area i.e. the payroll tax. In the Netherlands employers have to transfer payroll tax deducted from their employees to the Tax Authorities. But, deducted employees' social insurances should be transferred to special employees' social insurance institutions. As a consequence there are two different information flows originating from one highly interwoven administrative process in the enterprises: one to the social insurance institutions and one to the Tax Authorities. In order to avoid double counting the administrative burdens of these two closely related policy areas, 50% of the total administrative burdens of the two policy areas combined has been allocated to the policy area employees' social insurances and the other 50% to the policy area payroll tax. This reallocation of administrative burden is confined to the messages related to administrative activities referring to starting up or ending the deduction of taxes and contributions and to the payment of taxes and contributions.

#### 7.2.2 Administrative burdens per message

Table 7.1 contains figures of the administrative burdens related to the policy area employees' social insurances. Total administrative burdens were 878.1 million euros in 2000. Which items of the employees' social insurances cause most of the administrative

burdens within this policy area? A closer look at the figures shows that messages related to the payment of contributions (part B) account for almost 68% of all administrative burdens, viz. 596.5 million euros. Another important category of messages is related to the payment of benefits (part C); 29% or 258.2 million euros. Messages related to starting up or ending the deduction of contributions are responsible for the rest of the administrative burdens; only a small 3% or 23.5 million euros.

**Table 7.1 Administrative burdens for businesses resulting from employees' social insurances per message in the Netherlands, 2000, euros (x 1,000,000)**

<i>Code</i>	<i>Message</i>	<i>euros</i>
	All messages	878.1
A	Start/end deduction contributions*	23.5
A.0	TOTAL information payroll tax enforcing institution employees' social insurances	6.8
A.1	TOTAL application for connection number	3.2
A.2	TOTAL ending obligation to deduct contributions	13.4
B	Payment of contributions*	596.5
B.1	Total reporting duty employees' social insurances	26.2
B.2	Total wage records	46.9
B.3	Special allowances	112.9
B.4	Special remunerations	65.8
B.5	Taxable allowances	40.8
B.6	Wage in kind	22.4
B.7	Non- taxable allowances and supplies	173.9
B.8/9	Payment of contributions employees' social insurances	82.7
B.10	Total retrospective assessment	8.1
B.11	Total payment contribution disablement of self-employed (WAZ)**	14.6
B.12	Total inspection enforcing institutions	2.2
C	Payments of benefits	258.2
C.1	Messages related to sickness (ZW, WULBZ)	200.3
C.2	Messages related to disability to work (WAO, WAZ)	22.1
C.3	Messages related to unemployment (WW)	26.9
C.4	Messages related to (Re)integration of the Worked Disabled Act (REA)	8.8

\* 50% of all administrative burdens of the related administrative activities. The other 50% is allocated to the policy area payroll tax.

\*\* Strictly speaking the WAZ is not part of employees' social insurances.

Source: Boog, Nijssen, *Regter en Suyver*, 2001.

Part B, administrative activities related to the payment of contributions, is responsible for the larger part of all administrative burdens in this policy area. Which messages are responsible? A closer look shows that, in the case of employees' social insurances, most administrative burdens originate from the complexity of the legislation. Some elements of remuneration are taxable others are not. And the taxable remunerations are taxable



at different rates. Because of this, employers must register all these different elements of remuneration. For instance, the message related to special allowances (B.3) involves 112.9 million euros. Special allowances are relevant, for instances, in the case of the sub-messages overtime, irregularity, shift work, and loss of working hours due bad weather conditions etc. Message B.4, special remuneration, is also accompanied by heavy administrative burdens. Examples of special remunerations are the sub-messages holiday allowances, premiums and bonus etc. Also important are the administrative burdens incurred by message B.5, taxable allowances and supplies. This message refers, for instance, to the sub-messages reimbursements of travelling costs, telephone and clothing expenses etc. Finally, message B.7 - non-taxable allowances and supplies - incurs 173.9 million euros in administrative burdens. Examples of this type of allowances are the sub-messages reimbursements of costs for coffee, meals, training, seminars, books, and removal, etc.

Payment of benefits related messages create administrative burdens of 258.2 million euros, as can be seen in table 7.1. Especially, messages related to sickness of employees are very burdensome, 200.3 million euros. Reporting sickness and recovery by employers happens about 20 million times (frequency) a year.

### 7.2.3 *Administrative burden of one selected message*

Mistral<sup>®</sup> produces information in great detail. To demonstrate this one message, B12 inspection by enforcing institutions, has been selected from table 7.1. This message refers to the employers' compliance with transfer of information obligations by allowing inspectors to visit their firms in order to check whether all obligations related to the policy area employees' social insurances are complied with.

Table 7.2 shows that the frequency of the annual number of inspections is approximately 20,000. This means that in 2000 about 20,000 employers had to receive an inspector from one of the employees' social insurance institutions (or the Tax Authority).<sup>1</sup> It also indicates that 80% of all employers outsources the administrative of employees' social insurances, it would take longer to do it themselves even though it would be cheaper as internal rates are lower than outsourcing tariffs. Answering questions posed by inspectors and acting as intermediary with external contacts prove to be a particularly heavy burden.

Information at this detailed level allows policy to be initiated to reduce administrative burdens. What, for instance, would be the effect of a reduction of the number of inspections by 50%, because the inspectors could obtain some of the necessary information elsewhere, from the Tax Authorities, for example? Table 7.3 demonstrates the effects of such a policy measure showing that this would result in reducing the administrative burdens by 53%.

<sup>1</sup> From 2002 onwards there is only one employees' social insurance institution, the UWV.

Table 7.2 Administrative burden of message 'inspection of employees' social insurance administration by enforcing institutions' (message B.12) in the private sector of the Netherlands, 2000\*

<i>Administrative activities</i>	<i>Frequency Year 2000</i>	<i>Out- sourcing in %</i>	<i>Doing self time in minutes</i>	<i>Doing self euros per hour</i>	<i>Doing self burden in mln. euros</i>	<i>Outsourced time in minutes</i>	<i>Outsourced euros per hour</i>	<i>Outsourced burden in mln. euros</i>	<i>Total bur- den in mln. euros</i>
Collecting the required information	20861	80	23	31.56	0.05	7.7	39.45	0.08	0.13
Consultation with inspector	20861	80	15	31.56	0.03	5	39.45	0.05	0.09
Conducted tour, showing the documents	20861	80	8	31.56	0.02	2.7	39.45	0.03	0.05
Answering questions	20861	80	108	31.56	0.24	36	39.45	0.39	0.63
Concluding conversation	20861	80	8	31.56	0.02	2.7	39.45	0.03	0.05
Administrative action to correct shortcomings	20861	80	15	31.56	0.03	5	39.45	0.05	0.09
Receiving notice result of inspection	20861	80	3	31.56	0.01	1	39.45	0.01	0.02
Intermediary contacts between employers and external offices	16689	0	60	31.56	0.53	0	39.45	0.00	0.53
Intermediary contacts between external offices and employers	16689	100	0	31.56	0.00	60	39.45	0.66	0.66
Total administrative burdens of inspection					0.92			1.32	2.25

\* Inspection mostly combined with Tax Authorities.

**Table 7.3** Alternative case: reduction of the number of inspections by 50%; Administrative burden of message ‘inspection of employees’ social insurance administration by enforcing institutions (message B.12) in the private sector in the Netherlands, 2000\*

<i>Administrative activities</i>	<i>Frequency Year 2000</i>	<i>Out- sourcing in %</i>	<i>Doing self time in minutes</i>	<i>Doing self euros per hour</i>	<i>Doing self burden in mln. euros</i>	<i>Outsourced time in minutes</i>	<i>Outsourced euros per hour</i>	<i>Outsourced burden in mln. euros</i>	<i>Total bur- den in mln. euros</i>
Collecting the required information	103431	80	11,5	31.56	0.01	7.7	39.45	0.04	0.05
Consultation with inspector	10431	80	15	31.56	0.02	5	39.45	0.03	0.04
Conducted tour, showing the documents	10431	80	8	31.56	0.01	2.7	39.45	0.01	0.02
Answering questions	10431	80	54	31.56	0.06	36	39.45	0.20	0.26
Concluding conversation	10431	80	8	31.56	0.01	2.7	39.45	0.01	0.02
Administrative action to correct shortcomings	10431	80	15	31.56	0.02	5	39.45	0.03	0.04
Receiving notice result of inspection	10431	80	3	31.56	0.00	1	39.45	0.01	0.01
Intermediary contacts between employers and external offices	8345	0	60	31.56	0.26	0	39.45	0.00	0.26
Intermediary contacts between external offices and employers	8345	100	0	31.56	0.00	60	39.45	0.33	0.33
Total administrative burdens of inspection					0.39			0.66	1.05

\* Inspection mostly combined with Tax Authorities.

### 7.3 Meso results: industries and size classes

From table 7.4 it appears that the administrative burdens of the selected policy areas were about 4.3 billion euros in 2000. The Annual Accounts information obligations are particularly burdensome; 1.6 billion euros or 37% of all administrative burdens of the selected policy areas (see also table 7.5).

**Table 7.4** Administrative burdens for businesses in selected policy areas according to size class (final results); the Netherlands, 2000 (in billion euros)

<i>Policy area</i>	<i>Small enterprises</i>	<i>Medium sized enterprises</i>	<i>Large enterprises</i>	<i>Total</i>
Payroll tax and general social insurances*	176	188	357	722
Employees social insurances	173	161	296	630
Income tax	429	12	2	444
Corporate tax and dividend tax	153	62	33	248
VAT	558	97	19	673
Annual account	817	458	349	1,623
<b>Total</b>	<b>2,307</b>	<b>978</b>	<b>1,056</b>	<b>4,341</b>

\* Retirement, widows and orphans pension schemes, general health insurance.

\*\* This figure differs from the parallel figure in table 7.1 where the administrative burdens for this policy area are assessed to be 878 million euros. The reason for this difference is that in table 7.4 the administrative burdens of category C Payment of Benefits are not included.

The share of administrative burdens for small firms is 53% (see also table 7.5). The most burdensome policy areas for small firms are the Annual Account, VAT and Income tax. For large enterprises it appears that the policy areas linked to employees impose the greatest burden i.e. payroll tax and employees' social insurance.

**Table 7.5** Distribution of administrative burdens for businesses in selected policy areas according to size class (final results); the Netherlands, 2000 (percentages, total all policy areas is 100)

<i>Policy area</i>	<i>Small enterprises</i>	<i>Medium sized enterprises</i>	<i>Large enterprises</i>	<i>Total</i>
Payroll tax and general social insurances*	0.03	0.05	0.08	0.16
Employees social insurances	0.03	0.04	0.08	0.15
Income tax	0.10	-	-	0.10
Corporate tax and dividend tax	0.04	0.01	0.01	0.06
VAT	0.13	0.02	0.00	0.16
Annual account	0.20	0.11	0.07	0.37
<b>Total</b>	<b>0.53</b>	<b>0.23</b>	<b>0.24</b>	<b>1.00</b>

Table 7.6 shows that the administrative burdens of the selected policy areas are highest for repair and trade, real estate and business-to-business services and manufacturing. However, these figures are difficult to interpret. It goes without saying that administrative burdens are high in large sectors, related to the number of firms and/or the number of employees.

**Table 7.6** Administrative burdens for businesses in selected policy areas according to size class and industry, final results; the Netherlands, 2000, euros (x 1,000,000)

<i>Industry</i>	<i>Small firms</i>	<i>Medium sized firms</i>	<i>Large firms</i>	<i>Total</i>
Agriculture	177	5	2	184
Mining	2	1	2	5
Manufacturing	308	251	289	848
Electricity, water, gas	0	1	11	12
Building	174	156	77	407
Repair and trade	747	265	174	1,186
Hotel, catering	115	43	22	180
Transport, communication	83	77	95	255
Financing, insurances	72	19	64	155
Real estate, business to business	521	141	230	893
Health and welfare	89	16	89	193
Culture, sports and broadcasting, TV	18	3	2	22
All private industries	2,307	978	1,056	4,341

To clarify the figures administrative burdens are related to value added figures valued at factor costs for the various industries and size classes (see table 7.7). See Annex IV for detailed information about value added. This step is taken in order to show to what extent financial resources are redirected to administrative activities to comply with the transfer of information obligations imposed on a policy area.

**Table 7.7** Administrative burdens for businesses in selected policy areas according to size class and industry as a percentage of value added in the Netherlands, 2000 (percentages)

<i>Industry</i>	<i>Small firms</i>	<i>Medium sized firms</i>	<i>Large firms</i>	<i>Total</i>
Agriculture	2.2	0.3	0.3	1.8
Mining	0.6	0.1	0.0	0.1
Manufacturing	5.0	1.8	0.8	1.5
Electricity, water, gas	4.8	0.5	0.3	0.3
Building	3.3	1.7	1.1	1.9
Repair and trade	5.1	1.4	1.0	2.3
Hotel, catering	3.9	2.6	1.3	2.9
Transport, communication	2.8	1.3	0.6	1.0
Financing, insurances	2.9	0.9	0.4	0.7
Real estate, business to business	4.4	0.5	0.8	1.3
Health and welfare	3.1	0.9	0.8	1.3
Culture, sports and broadcasting, TV	4.4	1.1	0.7	2.4
All private industries	4.0	1.1	0.7	1.5

It appears from table 7.7 that the administrative burdens of all private enterprises are 1.5 percent of value added. It is emphasised that these are the administrative burdens for the six selected policy areas only. These six policy areas are subject to about 50% of all administrative burdens.<sup>1</sup>

One of the most striking facts is that small firms incur administrative burdens for the selected policy areas of 4% of their own value added. This is more than twice as much as the percentage for all firms, and almost six times as for large enterprises. The administrative burdens of the selected policy areas are disproportionately severe for small firms and regressive with respect to the size class of the firms.

Looking at the various industries, it appears that administrative burdens are relatively high for the sectors hotel and catering, (2.9%), culture, sports etc. (2.4%) and repair and trade (2.3%). These are all relatively small-scale sectors. As has already been shown, the Annual Account, VAT and Income tax are the most burdensome policy areas for small firms. Of course, the relatively lower level of value added, compared to large firms, in these industries and in small firms also explains the high percentage of administrative burdens related to value added.

<sup>1</sup> The total figure of the administrative burdens of all policy areas, as a percentage of value added is about 3%.

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## Annex I List of symbols used

The following symbols, together with their meaning, are used throughout the previous sub-sections:

$\alpha_{poma}$	Proportion of outsourcing for activity $a$ , part of message $m$ due to obligation $o$ for policy area $p$
$AB$	Total level of the administrative burden for all policy areas in the Netherlands
$AB_{perc}$	Level of the administrative burden for all policy areas as a percentage of the total business expenses
$AB_p$	Level of the administrative burden for policy area $p$
$Cost(Message_{pom})$	Cost of message $m$ due to obligation $o$ for policy area $p$
$Cost(Obligation_{po})$	Cost of obligation $o$ for policy area $p$
$ExternalTariff_{poma}$	External tariff in terms of money per hour for the person carrying out activity $a$ , part of message $m$ due to obligation $o$ for policy area $p$
$ExternalTime_{poma}$	Required time in minutes to perform activity $a$ , part of message $m$ due to obligation $o$ for policy area $p$
$Frequency_{poma}$	Frequency of activity $a$ necessary to compose message $m$ due to obligation $o$ for policy area $p$
$InternalTariff_{poma}$	Internal tariff in terms of money per hour for the person carrying out activity $a$ , part of message $m$ due to obligation $o$ for policy area $p$
$InternalTime_{poma}$	Required time in minutes within the business to perform activity $a$ , part of message $m$ due to obligation $o$ for policy area $p$
$NumberOfEntities_{poma}$	Number of reporting entities that have to engage in activity $a$ , to send to the government message $m$ due to obligation $o$ for policy area $p$
$Periodicity_{poma}$	Number of times per year that each reporting entity has to carry out activity $a$ , to send message $m$ to the government due to obligation $o$ for policy area $p$
$VA$	Value added values at factor costs

*The indices used:*

$a$	activity
$m$	message
$o$	obligation
$p$	policy area

*The various "number of entities" used:*

$n_p$	number of policy areas
$n_{po}$	number of obligations in policy area $p$
$n_{pom}$	number of messages associated with obligation $o$ in policy area $p$
$n_{poma}$	number of activities in message $m$ associated with obligation $o$ in policy area $p$

## Annex II      Breakdown of entities into size classes and industries

Table II.1      Number of enterprises in the private sector by size class and industry in the Netherlands, 2000

Industry	Size class			Total
	Small	Medium	Large	
Agriculture	102,753	505	24	103,283
Mining	332	60	6	398
Manufacturing	36,868	9,323	1,407	47,598
Electricity, water, gas	74	42	37	153
Building	62,767	7,815	452	71,035
Repair and trade	148,679	12,728	826	162,233
Hotel, catering	38,473	2,417	96	40,986
Transport, communication	23,939	4,003	376	28,317
Financing, insurances	15,891	1,207	152	17,250
Real estate, business to business	130,307	8,177	936	139,420
Health and welfare	31,292	1,055	303	32,650
Culture, sports and broadcasting, TV	7,299	249	24	7,572
All private industries	598,674	47,581	4,639	650,894

Table II.2      Number of employees in the private sector by size class and industry in the Netherlands, 2000

Industry	Size class			Total
	Small	Medium	Large	
Agriculture	59,024	9,623	4,729	73,376
Mining	286	1,998	6,242	8,527
Manufacturing	94,000	274,366	469,948	838,314
Electricity, water, gas	74	908	35,506	36,488
Building	79,338	207,545	125,965	412,848
Repair and trade	320,817	406,394	434,462	1,161,672
Hotel, catering	155,759	85,625	55,429	296,813
Transport, communication	49,377	126,965	251,996	428,338
Financing, insurances	25,242	26,738	231,499	283,479
Real estate, business to business	167,615	247,331	695,761	1,110,707
Health and welfare	87,979	62,955	342,798	493,732
Culture, sports and broadcasting, TV	7,299	4,736	4,663	16,698
All private industries	1,046,810	1,455,182	2,658,999	5,160,991

**Table II.3** Number of self-dependents in the private sector by size class and industry in the Netherlands, 2000

Industry	<i>Size class</i>			Total
	Small	Medium	Large	
Agriculture	165,038	0	0	165,038
Mining	99	0	0	99
Manufacturing	49,281	3,096	0	52,376
Electricity, water, gas	0	0	0	0
Building	72,594	1,007	0	73,601
Repair and trade	183,003	4,069	31	187,103
Hotel, catering	55,345	1,168	2	56,514
Transport, communication	26,773	1,362	702	28,837
Financing, insurances	11,504	571	0	12,075
Real estate, business to business	112,891	5,325	1,861	120,077
Health and welfare	30,760	0	0	30,760
Culture, sports and broadcasting, TV	6,846	0	0	6,846
All private industries	714,133	16,597	2,596	733,327

**Table II.4** Number of corporate firms in the private sector by size class and industry in the Netherlands, 2000

Industry	<i>Size class</i>			Total
	Small	Medium	Large	
Agriculture	1,180	139	6	1,325
Mining	195	57	6	259
Manufacturing	10,435	8,549	1,329	20,313
Electricity, water, gas	50	24	37	111
Building	10,426	6,862	452	17,741
Repair and trade	34,113	10,785	802	45,700
Hotel, catering	3,843	1,593	92	5,528
Transport, communication	5,709	3,268	342	9,319
Financing, insurances	6,362	940	133	7,436
Real estate, business to business	44,891	5,869	666	51,427
Health and welfare	4,711	55	8	4,773
Culture, sports and broadcasting, TV	922	123	7	1,051
All private industries	122,838	38,265	3,881	164,984

## Annex III Outsourcing and tariffs

Table III.1 Percentages for degrees of outsourcing according to policy area and size class; the Netherlands

<i>Policy area</i>	<i>Small enterprises</i>	<i>Medium sized enterprises</i>	<i>Large enterprises</i>	<i>Total</i>
Payroll tax and general social insurances*	85	30	10	80
Employees social insurances	85	30	10	80
Income tax	90	90	90	90
Corporate tax and dividend tax	87	70	30	85
VAT	0	0	0	0
Annual account	67	50	20	65

\* Retirement, widows and orphans pension schemes, general health insurance.

Table III.2 Internal tariffs\*\* of firms in the private sector referring to the administrative activities of the selected policy areas by size class in the Netherlands, 2000

<i>Policy area</i>	<i>Small firms</i>	<i>Medium-sized firms</i>	<i>Large firms</i>	<i>Total</i>
euros				
Payroll tax and general social insurances*	30.9	36.4	45.5	31.8
Employees social insurances	30.9	36.4	45.5	31.8
Income tax	29.5	n.a.	n.a.	29.5
Corporate tax and dividend tax	36.4	52.3	79.5	38.6
VAT	29.5	40.9	63.6	31.8
Annual account	40.9	59.1	90.9	45.5

\* Old age, widows and orphans pension schemes, General sickness insurance.

\*\* Labour costs inclusive overhead.

**Table III.3 External tariffs of firms in the private sector referring to outsourcing of the administrative activities of the selected policy areas by size class in the Netherlands, 2000**

<i>Policy area</i>	<i>Small firms</i>	<i>Medium-sized firms</i>	<i>Large firms</i>	<i>Total</i>
euros				
Payroll tax and general social insurances*	36.4	52.3	79.5	39.1
Employees social insurances	36.4	52.3	79.5	39.1
Income tax	56.8	n.a.	n.a.	56.8
Corporate tax and dividend tax	65.9	90.9	136.4	70
VAT	n.a.	n.a.	n.a.	n.a.
Annual account	81.8	118.2	181.8	90.9

\* *Old age, widows and orphans pension schemes, General sickness insurance.*

## Annex IV Value added

Table IV.1 Value added of firms in the private sector by size class and industry in the Netherlands, 2000 (euros x 1,000,000)

<i>Sector</i>	<i>Size class</i>			<i>Total</i>
	<i>Small</i>	<i>Medium</i>	<i>Large</i>	
Agriculture	7,880	1,495	656	10,030
Mining	339	2,365	7,400	10,105
Manufacturing	6,119	13,984	37,299	57,403
Electricity, water, gas	9	114	4,470	4,593
Building	5,270	9,106	7,040	21,416
Repair and trade	14,781	19,160	16,991	50,932
Hotel, catering	2,972	1,684	1,646	6,302
Transport, communication	3,001	5,957	16,989	25,946
Financing, insurances	2,512	2,069	18,059	22,640
Real estate, business to business	11,764	29,982	27,292	69,038
Health and welfare	2,885	1,689	10,818	15,392
Culture, sports and broadcasting, TV	411	260	256	928
All private industries	57,943	87,865	148,917	294,725





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